



**The Claims:** We claim:

- 9 (new). In the field of Surgery, a surgical trochar suitable for coupling to guide means, comprising :
- an elongate rod having a first end which is sharp pointed, and
- a second end with tubing attachment means, and wherein
- said second end also has indexing means.
- 10 (new). The surgical trochar of Claim 9, wherein said rod is bent such that said first end is at an angle to said second end.
- 11(new). The surgical trochar of Claim 10 wherein said indexing means has an axis perpendicular to linear axis of said second end and coplanar with the plane of said bend.
- 12 (new). The surgical trochar of Claim 11 wherein said indexing means is a groove.
- 13 (new). The surgical trochar of Claim 9 wherein a rigid sheath is locked onto said first end, thereby protectively covering said sharp point.
- 14 (new). The surgical trochar of Claim 13, wherein said sheath has releasable locking means of attachment to trochar rod.
- 15(new). The surgical trochar of Claim 14 wherein said releasable locking means is a planar element with a hole into which locks said trochar rod.
- 16(new). The surgical trochar of Claim 13, wherein said sheath is substantially cylindrical, with index means relative to axis of rotation about linear axis.
- 17(new). The surgical trochar of Claim 13 wherein said sheath has locking means for attachment to guide means.
- 18(new) A guide for installing a surgical trochar comprising:

a first end having receiver means for said surgical trochar, a second end having holder means for securing thereto said surgical trochar in all degrees of freedom, and;

connecting means wherein said first end and said second end are guided in continuous mutual alignment such that the sharp end of said trochar will follow a specified line from within said first end to a point distal from first end and then back again into the first end when said guide is actuated.

- 19(new).        The guide of Claim 18 wherein said receiver means is positioned to support tissue while being pierced by trochar.
- 20(new).        The guide of Claim 18 wherein said receiver means has pivot means such that said surgical trochar may be angled, thereby providing optimal handle leverage for pulling said trochar and tubing through tissue.
- 21(new).        The guide of Claim 18 wherein said holder means has a plurality of articulated elements suitable for accepting said surgical trochar between them when in an open attitude and alternately forcing the trochar into a predetermined aligned position with said receiver means when in a closed attitude, and wherein holder means is suitably strong so as to hold trochar against forces required for piercing tissue.
- 22(new).        The guide of Claim 18 wherein said receiver means and said holder means are conjoined by telescoping connecting means.
- 23(new).        The guide of Claim 22 wherein said telescoping alignment means has a controlling means over said telescoping means, which controlling means provides priority to receiver means over holder means.
- 24(new).        The guide of Claim 18 wherein said surgical trochar is releasable from said holder means if and only if trochar point is inside of said receiving means.

- 25(new). The guide of Claim 18 wherein said surgical trochar is unlockable from said receiver means one time only, following which first time, complete removal of surgical trochar from said guide is required, whereby the combination of trochar and guide provide quick, simple hardware for insertion of surgical drains with only one hand required, while fingers are a safe distance away from insertion and exit location of sharp point of trochar and further, whereby a trochar may not be used two times in succession.
- 26(new). In the area of surgery a method for installing surgical drain tubing, comprising the steps of:
- providing
    - a surgical trochar comprising :
      - an elongate rod having a first end with a sharp point,
      - a second end with tubing attachment means, and
      - wherein said second end also has indexing means, and
      - further where
      - said first end has a protective sheath, and
    - a guide for installing said surgical trochar, comprising:
      - a first end with receiver means for the surgical trochar,
      - and a second end with holder means for securing the surgical trochar in all degrees of freedom, and
      - connecting means wherein;
      - said first end and said second end are guided in continuous mutual alignment such that sharp end of said trochar will follow a specified line from within said first end to a point distal from first end and then back again into the first end when said guide is actuated.

inserting said first end of surgical trochar into said receiver means of said guide and installing said second end of surgical trochar into said holder means of said guide and,  
actuating said connecting means such that trochar sharp point is available and further,  
placing sharp point of trochar at desired point of entry into tissue and placing receiver means over location of desired exit of trochar from tissue and then reversing actuation of connecting means, thus piercing tissue, and further,  
releasing holder means, thus causing receiver means to pivot such that guide assumes an angle suitable for pulling surgical trochar and tubing through tissue, and,  
pulling guide so as to advance trochar and tubing the desired distance through tissue, and,  
cutting drain tubing, and lastly,  
rotating guide further, such that receiving means releases surgical trochar with protective sheath, for disposal,  
thereby to install surgical drain tubing, quickly easily and without the need to place fingers near trochar sharp point and further without the need to use additional instruments to pull trochar through tissue, and yet further to use only one hand and still further to ensure that trochar is used only one time.